

REMARKS

This Amendment is filed in response to the non-final Office Action of January 2, 2009 in which claims 1-3 and 5-22 were rejected and claim 4 objected to.

Claim 1 has been amended without prejudice to include that step d) comprises the step of:

- catalyzing the hydration of at least a portion of the CO<sub>2</sub> contained in the exhaust gas and producing a solution containing hydrogen ions and carbonate ions; and wherein said hydration is catalyzed by the enzyme carbonic anhydrase or an analog thereof.

Therefore, the subject matter of claim 4 has been incorporated within claim 1, as well as the first step defined in former claim 2. Claim 3 has been cancelled.

As a consequence of the amendment made to claim 1, the expression “biocatalyst” in former claims 5, 6, 7, 8 and 9 has been changed to the expression “enzyme carbonic anhydrase or said analog thereof.”

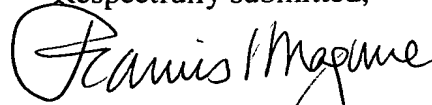
Independent claim 15 has also been amended to include as a biological means a bioreactor including a reaction chamber filled with the enzyme carbonic anhydrase or an analog thereof to catalyze the hydration of dissolved CO<sub>2</sub> into hydrogen ions and bicarbonate ions.

Consequently, claim 17 has been cancelled and the expression “biocatalyst” in claims 20 to 22 has been replaced by the expression “enzyme carbonic anhydrase or the analog thereof.”

Applicants believe that new proposed claims 1 and 15 which now specify the use of carbonic anhydrase now conform with the Examiner’s interpretation of 35 U.S.C. § 112, 1<sup>st</sup> paragraph and withdrawal of the rejection is requested.

The objections and rejections of the Office Action of January 2, 2009, having been obviated by amendment or shown to be inapplicable, withdrawal thereof is requested and passage of claims 1-2, 5-16 and 18-22 to issue is solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Francis J. Maguire". The signature is written in a cursive style with a large, looping initial "F".

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